DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
NATIONAL INSTITUTES OF HEALTH
BETHESDA, MARYLAND 20014

March 18, 1974

Mrs. Albert D. Lasker
29 Beekman Place
New York, New York 10022

Dear Mary,

Thank you for your letter of January 7, 1974.

You are absolutely correct, of course, when you say that we can't go on asking for more money from the President and the Congress unless we demonstrate progress in the clinical area or at least show that we are making a specific effort in the clinical area. In fact, we are putting a great deal of emphasis on clinical studies and this is reflected in the allocation of our budget.

Although the chart you enclosed shows a large number of situations where drugs have not been evaluated, it should not be interpreted as a precise measurement of clinical progress. There are many instances where there would be no reason to evaluate the effect of a particular drug against a certain tumor type. For example, if several anti-metabolites had not shown activity in one tumor type, it would be very unlikely that yet another anti-metabolite would be of benefit. However, many of the drugs which are listed as "not evaluated" against certain tumors are presently in clinical trials against those tumors. For example, Ara C and methotrexate are being evaluated in stomach cancer, actinomycin D and vinblastine in head and neck cancer, hydroxyurea in esophagus cancer, and methotrexate and Me CCNU in sarcoma. Each of these drugs is being combined with other drugs in these studies.

I think you would be interested in current concepts in the Division of Cancer Treatment for the management of patients with solid tumors. Let me briefly outline this for you.

First, clinical experience suggests that different diseases have different therapeutic requirements necessitating individualization of

treatment strategies. Therefore, a major feature of new therapeutic approaches is that they are disease rather than modality oriented.

Since we cannot attack all the cancers simultaneously, priorities among solid tumors are being established on the basis of incidence, mortality and probability of success. This effort will help us define single agents, drug combinations or combinations of modalities for each tumor type.

Secondly, we have learned from experience with the more rapidly growing tumors in man and from animal tumor studies that combinations of drugs are almost invariably more effective than single agents. Accordingly, as soon as the spectrum of activity of an effective drug has been identified, the drug is incorporated into a combination with other agents effective against a particular tumor type.

Due to the strong evidence in support of drug combinations and combinations of different modalities, a great deal of the clinical resources are being devoted, and I think rightfully, to these studies. However, this situation does make it somewhat difficult to go back and do clinical trials such as those needed to fill in the gaps in the chart.

Thirdly, surgery and radiotherapy applied as primary treatments have the highest curative potential of all modalities on solid tumors without disseminated disease. However, undiagnosable microscopic metastatic disease foci can exist at the time of primary treatment. This imposes an upper limit to the curative potential of surgery and radiotherapy since these modalities cannot affect tumor cells in distant sites. Eradication of the last neoplastic cell requires systemic treatment. Chemotherapy and possibly immunotherapy can kill neoplastic cells anywhere in the body and, hence, have the potential for destroying all metastatic foci of early disease. Evidence exists to suggest that chemotherapy and immunotherapy are maximally effective at the time when the tumor cell population is small (i.e., either early in the disease or after surgical removal of the primary tumor mass). Accordingly, another major feature of new therapeutic approaches is that they combine local and systemic modalities into an integrated strategy for primary treatment of specific diseases.

I am attaching a table, titled "Chemical Studies in Cancer Therapy," which shows the activities of the NCI-supported Cooperative Clinical Groups, the Study Groups or Task Forces and NCI contract studies. In addition, there is a column for the studies being conducted directly by the National Cancer Institute. As you can see, there is a large amount of clinical study involving each of the tumor sites, and the

coordination of these studies is a more significant problem than the fact that certain individual chemical compounds are not being evaluated against certain types of tumors. As you know, much work is now being conducted with combined therapy using multiple modalities, as well as multiple drug regimes, and these activities are considered to have a high potential for usefulness. I have your letter of February 20 requesting a list of the combination chemotherapy trials underway. The staff is collating the information and I hope to provide it to you before the Board meeting ends March 20.

I also am attaching a table, titled "Support and Conduct of Clinical Efforts in Treating Cancer Patients." As the table indicates, NCI supports clinical studies in the therapy of all forms of cancer. These include hematological cancers, such as the leukemias and lymphomas, and all solid tumors, including those most often found in children (Ewing's sarcoma, neuroblastoma, retinoblastoma, rhabdomyosarcoma, and Wilms' tumor).

The table breaks down these studies by NCI grant-, contract-, and in-house-supported programs. The table indicates the amount of funds designated for these programs in NCI's budget for fiscal year 1974. Grant-supported programs include Clinical Cooperative Groups, Cancer Centers, and Organ Site Programs, and contract-supported activities include Task Forces and extramural studies. NCI scientists in the Division of Cancer Treatment and Division of Cancer Biology and Diagnosis conduct clinical studies at the Institute. The Cancer Control Program is now awarding contracts and grants for demonstration purposes so that recently accepted therapeutic techniques can be brought to the practicing physician.

These programs encompass treatment research on all forms of cancer by single or combined modalities. However, as indicated above, insufficient funds, lack of knowledge, infrequency of disease or a combination of these factors, have resulted in some cancer sites receiving less emphasis than others.

Study of some of the most frequently occurring forms of cancer has been organized into special programs such as task forces and organ site programs. The task forces, supported by contracts, are administered by NCI scientists and have been developed for study of cancers of the lung and breast. The organ site programs, supported by grants, are national in scope and are administered at institutions outside of NCI; they have been established to study cancers of the bladder, prostate, and colon.

A grant application to be reviewed at the March meeting of the National Cancer Advisory Board describes plans for a comprehensive research program for study of cancers of the head and neck. Such a planning grant has already been awarded for planning of a comprehensive research program for cancer of the pancreas, intended to be the basis for establishing a national organ site program at the approval of the National Cancer Advisory Board. However, since a select subcommittee of the Board is examining the administration and management of established task forces and organ site programs, NCI will not increase these programs until the committee makes its recommendations.

The Institute also is developing major programs to ensure that the latest and best cancer information is readily available to the public and to health care professionals. One of these programs, conducted by the Office of Cancer Communications, is headed by an Associate Director whom you know, Frank Karel. His responsibilities include the disposition of nearly all such inquiries addressed to NCI. Particular attention is given to those from persons seeking information regarding the availability of clinical services and about all aspects of cancer detection, diagnosis, treatment and rehabilitation. Mr. Karel's staff answers thousands of such inquiries by mail and telephone annually.

A number of other inquiries are forwarded for response to other program areas of NCI. This happens when highly technical information is being sought, usually by physicians and other professionals. Also, NCI physicians at the NIH Clinical Center frequently consult on patient care with practicing physicians either in response to a direct phone call or by referral from the Office of Cancer Communications.

When cancer patients and their families write or phone for assistance in finding or selecting clinical services, the Office of Cancer Communications tailors the response to each inquiry, but the following information is provided in all instances:

(1) a description of the Clinical Cooperative Studies Program and the name, address and phone number of the appropriate principal investigators--either those closest or, if the cancer type is known, those treating that form of cancer;

(2) a description of the Comprehensive Centers Program and the name, address and phone number of the Director of the nearest Center;

(3) a booklet on the NIH Clinical Center's patient care program, plus an admission application and the name and phone number of an NCI oncologist willing to consult with the inquirer's local physician; and

(4) a pamphlet on the specific form of cancer--which includes a general description of optimum diagnosis and treatment measures--or,

if the cancer type is not known, a pamphlet on cancer treatment that covers most forms of the disease in general terms.

The Office of Cancer Communications is currently working with the Cancer Control Program to expand and refine this information package. In addition, data on Clinical Cooperative Studies are being cross indexed and computerized for instant access. This information will include where the latest treatment regimens by cancer site are being tested and where various chemotherapeutic drugs are being studied.

After we cut through some relatively new red tape imposed by HEW, the Office of Cancer Communications will implement plans for increasing public awareness of cancer and what the national program is doing. This will make professionals and laymen alike more receptive to the specific efforts of our Cancer Control and Centers Programs. It also will increase the number of inquiries phoned and mailed to NCI, and the Office of Cancer Communications is expanding its capabilities to handle these by developing a National Cancer Information Clearinghouse. Through the Clearinghouse, staff also will be working with other units of NCI and with other Federal and non-Federal agencies and institutions to increase the quality and quantity of cancer information available in this country. This service will be widely publicized and will be provided in conjunction with similar activities of the American Cancer Society.

The other major program to ensure that the latest and best cancer information is readily available to the public and to professionals is, of course, the Cancer Control Program.

The application of clinical research results is the responsibility of the NCI Cancer Control Program; indeed, proper therapy, to the full extent of present knowledge, is an essential ingredient of cancer control. Unfortunately, the failure to achieve timely and effective treatment for cancer is a common experience which too frequently results from the lack of effective methods, trained personnel, suitable facilities, and supporting services. The identification, field testing, evaluation, demonstration and promotion of new and improved methods and techniques of cancer treatment and follow-up care and their dissemination to practicing physicians and the public is essential to the effective control of cancer.

An essential ingredient of the total treatment of the cancer patient is rehabilitation--the process for restoring maximal physical, psychological, social, and vocational functions lost as a result of injury, disease and/or

the treatment for disease. Ideally, it is initiated following definitive diagnosis and is coordinated with the primary treatment plan. It logically continues through and beyond the period of treatment. Continuing care endeavors to provide the required support and services needed by those patients whose cancer cannot be controlled.

The objectives of the Treatment, Rehabilitation, and Continuing Care Intervention are to assure: 1) with the aid of health professionals and other groups, the continuous assessment of current practices and the development of principles for the optimal treatment of cancer patients; 2) optimal treatment and follow-up care methods and techniques are available to and utilized by cancer patients; 3) optimal rehabilitation methods and techniques are available to and utilized by cancer patients; 4) optimal palliative and supportive care methods and techniques are available to and utilized by patients with recurrent and/or disseminated cancer.

The present activities of Treatment, Rehabilitation and Continuing Care center about programs in clinical chemotherapy; genital tract cancer, radiation physics centers; breast cancer, and head and neck cancer treatment and rehabilitation networks; integrated cancer rehabilitation services; psycho-social and vocational interventions, training of physical and occupational therapists, and community outreach programs via comprehensive centers.

Future activities in this intervention area will undertake to promote more effective communications among physicians, health professionals, and the public regarding the treatment and rehabilitation of cancer patients. Particular emphasis will be placed on the use of community resources and mechanisms. Added emphasis will be placed on the identification of new methods and techniques to be demonstrated to both health professionals and the public where appropriate. It will also be necessary to develop and support a broad spectrum of rehabilitative and continuing care activities. In addition to the traditional approach, such activities will include counseling to the patient and his or her family to maintain family competence ensuring adequate self-care, personal care, and vocational functions.

You may already know that NCI is supporting a dial-access information system at M.D. Anderson Hospital and Tumor Institute. The system allows practicing physicians in the region to call the hospital toll-free to receive taped information on 160 cancer topics. Roswell Park supports two systems: one provides taped information to laymen inquiring about a variety of cancer topics, and the other provides treatment information to calling physicians. In addition, there are several other such systems in operation around the country.

One of the concerns about dial-access systems is that they have not been properly evaluated, and there is healthy skepticism that the telephone is a reliable medium either to get detailed treatment and diagnostic information to professionals or to help patients get to the right kind of care. Both NCI and the Health Resources Administration are looking for ways to evaluate these systems. In fact, our Cancer Control Program now is negotiating a contract with Roswell Park to evaluate its system for laymen.

I hope the foregoing, and the attached tables, respond to your concerns, but if you have other questions, please let me know.

Sincerely,

Frank J. Rauscher, Jr., Ph.D.
Director, National Cancer Program
National Cancer Institute

3 Enclosures